

REMARKS

Reconsideration is respectfully requested. Claims 1, 2, 4 and 6 are present in the application. Claims 1, 2, 4 and 6 are amended.

Claims 1, 2 and 4 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

The Examiner asserts that the limitation "a two variable data" is mis-descriptive, stating that the sampling function is operated based on only one variable dimension "t"

As previously noted, Applicant respectfully believes that the claim was appropriate as given, as the system is a two variable data interpolation system and the sampling function is appropriately described.

However, to further prosecution and lead to earlier allowance, the claims are amended to remove the term "two variable" from the preamble of the claims.

Claims 1, 2, 4 and 6 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Masaru et al ("A Smooth Signal Generator Based on Quadratic B-spline Functions") in view of Maltsev et al (U.S. 6,018,597). Applicant respectfully traverses.

In the office action, the Examiner states that Masaru et al discloses the sampling function having the definition of the same contents of the amended claim 1.

Applicants respectfully cannot agree with this opinion. The equation (2) in the right column on page 1252 of the Masaru Kamada document is showing a definition of B spline function. The B spline function expressed by the equation (2) is same as the definition of the B spline described in claim 4 of the present application, fundamentally. It is not, however, the sampling function.

It is respectfully submitted that the Examiner is mis-interpreting what is taught by the document. The B spline function of equation 2 in the cited document is not the sampling function in the cited document. The sampling function generated using the B spline is not the function of local support.

Equation (2) of the cited document shows the definition of B spline function, instead of the definition of sampling function.

This B spline function is a function of local support. However, the sampling function explained by equations (3)-(6) of the cited document is defined by using this B spline function. What the cited document shows is that the sampling function of the cited document is generated by weighting and adding infinite numbers of B spline functions while varying the position of the horizontal direction shown in Fig. 1. That is, though the B spline function is a function of local support, the sampling

function generated by using this B spline function is not a function of local support. From the waveform of Fig .1, although it is somewhat blurred, it can be seen that as getting closer to  $t = \pm\infty$ , it converges on 0. Thus the waveform of Fig.1 is not a waveform of the local support. This is clear from the equation (3). But, that converging to zero does not meet the definition of local support, since the value will never reach zero. It will approach zero, but not reach zero. To be a value of local support, it must be zero ("where function values have finite values except zero in a local region and become zero in regions different from the region is called a "local support."", specification of the present application, page 1). The value of Masaru et al will not become zero in regions different from the local region.

Accordingly, the document cannot teach or suggest applicant's claims. Further, the addition of Maltsev does nothing to fill in the missing teaching of Masaru et al.

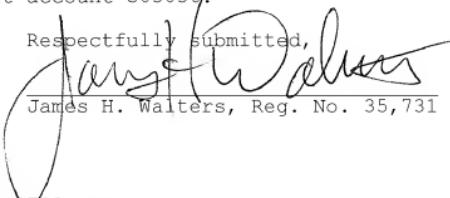
It is respectfully submitted that the combination proposed by the Examiner would not produce the claimed invention, whether the documents are considered alone or when they are combined, and accordingly, claims 1, 2, 4 and 6 are allowable.

In light of the above noted amendments and remarks, this application is believed in condition for allowance and notice thereof is respectfully solicited. The Examiner is asked to

contact applicant's attorney at 503-224-0115 if there are any questions.

It is believed that no further fees are due with this filing or that the required fees are being submitted herewith. However, if additional fees are required to keep the application pending, please charge deposit account 503036. If fee refund is owed, please refund to deposit account 503036.

Respectfully submitted,

  
James H. Walters, Reg. No. 35,731

Customer number 802  
patenttm.us  
P.O. Box 82788  
Portland, Oregon 97282-0788 US  
(503) 224-0115  
DOCKET: A-371

Certification of Electronic Transmission

I hereby certify that this correspondence is being electronically transmitted via the EFS to the Patent and Trademark Office on this January 16, 2007.